

A NEW SPECIES OF *AETIDEUS* (COPEPODA: CALANOIDA) FROM THE EQUATORIAL ATLANTIC^{1,2}

GEORGE W. CALEF AND GEORGE D. GRICE
Woods Hole Oceanographic Institution, Massachusetts

ABSTRACT

A new species of the copepod genus *Aetideus* is described and drawn from specimens collected off the northeastern coast of South America. It is distinguishable from the two other congeneric species by a double row of spines on the first basipodal segment of the fourth foot, and by its smaller size.

INTRODUCTION

The plankton sample containing the new copepod was collected during an oceanographic survey of the waters off the northeastern coast of South America by the research vessel ATLANTIS II. The species is referable to the genus *Aetideus* Brady, 1883.

Aetideus atlanticus n. sp.

Figs. 1-15

Localities and materials.—9°17'N, 58°25'W, ATLANTIS II, cruise 14, Station 442, November 1, 1964. 200-0 m depth of tow, two females.

Types.—The holotype has been deposited in the U.S. National Museum (U.S.N.M. no. 112568) and the paratype in the Woods Hole Oceanographic Institution collections (W.H.O.I. no. 2837).

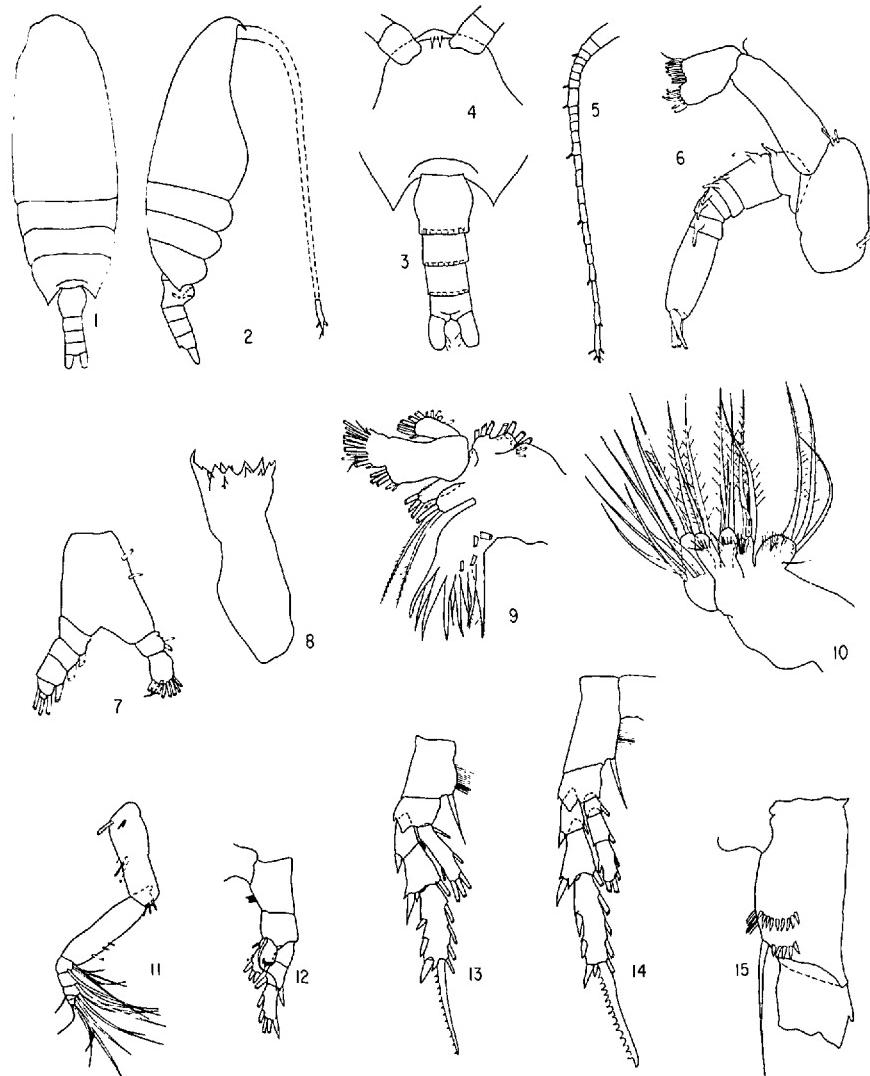
Staining and measurement.—The copepods were examined after staining with methyl blue dissolved in lactic acid. The total length was measured from the anterior margin of the head to the end of the furca, disregarding any telescoped segments of the abdomen. The holotype measured 1.40 mm and the paratype 1.44 mm.

Description.—The cephalothorax is elongate, with the first thoracic segment fused with the cephalon (Figs. 1, 2). The second and third thoracic segments are approximately equal in length. The fourth and fifth segments are fused, and the corners of the fifth segment are produced straight back into a point which reaches approximately to the middle of the genital segment (Fig. 3).

The double pointed rostrum (Fig. 4) curves back beneath the cephalon and therefore is not visible in dorsal view. The first antenna (Fig. 5) reaches to the second abdominal segment and has twenty-three free

¹Contribution No. 1622 from the Woods Hole Oceanographic Institution. This study was supported in part by the U.S. Atomic Energy Commission, contract AT (30-1)-1918 and the U.S. National Science Foundation (GB 901).

²While this paper was in press W. Vervoort (1965. Pelagic Copepoda. pt. 2, Atlantide Report No. 8) described a new genus and species, *Paivella inaciae* which is conspecific with *Aetideus atlanticus*. *A. atlanticus* therefore becomes a junior synonym for *P. inaciae*.



FIGURES 1-15. *Aetideus atlanticus*, n. sp., female. 1, dorsal view; 2, lateral view; 3, dorsal view of abdomen and fifth thoracic segment; 4, forehead, ventral view; 5, first antenna; 6, second antenna; 7, mandibular palpus; 8, gnathal lobe of mandible; 9, first maxilla; 10, second maxilla; 11, maxilliped; 12, first foot; 13, second foot; 14, third foot; 15, basipodal segment of fourth foot. All figures drawn from holotype.

segments; the eighth and ninth, and the twenty-fourth and twenty-fifth segments are fused. The basipodal segment of the second antenna (Fig. 6) bears one seta proximally and two setae distally. The exopod has seven segments; the first and the third through sixth segments each bear a strong seta; the second segment has two setae, while the seventh segment has three terminal setae. The endopod has two segments. The first segment has one small seta and the second bears fifteen setae. There are two setae on the base of the mandibular palpus (Fig. 7). The two-segmented endopod has two setae on the first segment, and nine setae on the second segment. The exopod is five-segmented, and bears a total of six setae. There are several rows of sharp pointed teeth on the gnathal lobe of the mandible (Fig. 8). The first inner lobe of the first maxilla (Fig. 9) bears nine spines and four setae. The second and third inner lobes bear four and three setae respectively. There are five setae on the second basal segment and fourteen on the endopod. The exopod has eleven setae. There are seven large and two small setae on the outer lobe. The second maxilla (Fig. 10) has five lobes. The first lobe has three large and one very small setae. The second and third lobes each have two large, one medium, and one small setae. The fourth and fifth lobes each bear two thin setae, and one very coarse one. The endopod has six setae which have enlarged bases extending to about one-third of their length. The maxilliped (Fig. 11) has a five-segmented endopod, and elongated first and second basipodal segments.

The four pairs of feet (Figs. 12-15) each have three-segmented exopods. The endopods of the first and second feet consist of one segment. The endopods of the third and fourth pairs of feet are composed of three segments. There is no spine on the lateral margin of the first exopodal segment of the first pair of feet. The first basipodal segments of the fourth pair of feet each have two rows of teeth-like spines, which are situated on elevated lobes (Fig. 15).

Affinities.—The new species is similar to *A. armatus* (Boeck, 1873) and to *A. pacificus* Brodsky, 1950 (the only other species in the genus), but is easily distinguishable from these two species by the presence of the two rows of spines on the first basipodal segment of the fourth feet, and by its smaller size.

SUMARIO

UNA NUEVA ESPECIE DE *Aetideus* (COPEPODA: CALANOIDA) DEL ATLÁNTICO ECUATORIAL

Una nueva especie de copépodo del género *Aetideus* fué recolectada frente a la costa noreste de Sur América. El copepódo es nombrado *Aetideus atlanticus*. Es similar a *A. armatus* y *A. pacificus* pero difiere por la presencia de una doble hilera de espinas en el primer basipodito de la cuarta pata por su tamaño menor.

REFERENCES

BOECK, A.

1873. Nye Slaegter og Arter af Saltvands-Copepoder. Forh. Vid. Selsk., Christiana, 1872, pp. 35-60.

BRADY, G. S.

1883. Report on the Copepoda collected by H.M.S. *Challenger* during the years 1873-76. Report on the Scientific Results of H.M.S. *Challenger*, Zoology, 8, pp. 1-142.

BRODSKY, K.

1950. Calanoida of the far eastern seas and the polar seas of the U.S.S.R. Opred. Faune S.S.S.R. Isdav. Zool. Inst. Acad. Nauk. S.S.S.R., 35, 441 pp. (In Russian.)